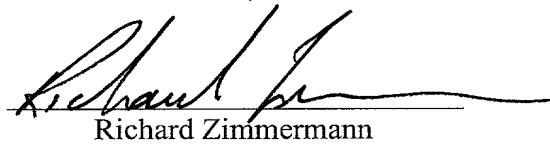


REISSUE PATENT APPLICATION

Docket No. 06005/34687A

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In Re Reissue Application of:) "EXPRESS MAIL" mailing label No.
Krivoshein et al.) **EL564457123US**
)
U.S. Patent No. 5,980,078) I hereby certify that this paper and all
) documents referred to therein as being
) enclosed are being deposited with the
) United States Postal Service
) "EXPRESS MAIL POST OFFICE TO
) ADDRESSEE" service under 37
) C.F.R. §1.10 addressed to:
) Commissioner for Patents,
) Washington, D.C. 20231 on this date:
)
For: PROCESS CONTROL)
SYSTEM INCLUDING)
AUTOMATIC SENSING AND)
AUTOMATIC)
CONFIGURATION OF)
DEVICES)
)
Filed: Herewith) Date: November 9, 2001
)
Group Art Unit: Unknown)
)
Examiner: Unknown)
)



Richard Zimmermann

AMENDMENT "A"

Commissioner for Patents
Washington, D.C. 20231

Sir:

The following claims are being submitted for the above identified reissue application of original application (Serial No. 08/799,966), now U.S. Patent No. 5,980,078. A copy of the claims illustrating the additions and deletions made is attached hereto as an appendix labeled "Version of Claims With Markings Showing All Changes Made."

In the Claims:

Please amend claims 1-6, and 22 of original application (Serial No. 08/799,966) as follows:

1. A process control system comprising:
 - a process;
 - a plurality of devices coupled to the process;
 - a communication network coupled to the devices;
 - a workstation coupled to the plurality of devices via the network and including a user interface; and
 - a software system executable on the network and implementing a routine for automatically sensing a connection of a device to a network and placing the connected device in a standby state for communicating with a user via the user interface prior to commissioning the connected device into a predefined control configuration including:
 - a routine for configuring the connected device in a network control configuration of the plurality of devices, wherein the routine for configuring the connected device further includes:
 - a user-interactive routine for determining a device type of the connected device;
 - a user-interactive routine for determining a role of the connected device with respect to the process control system;
 - a user-interactive routine for assigning a physical device tag the determined role; and
 - a user-interactive routine for verifying connection of the device to the network.

2. A process control system comprising:

- a process;
- a plurality of devices coupled to the process;
- a communication network coupled to the devices;
- a workstation coupled to the plurality of devices via the network and including a user interface; and

a software system executable on the network and implementing a routine for automatically sensing a connection of a device to a network and placing the connected device in a standby state for communicating with a user via the user interface prior to commissioning the connected device into a predefined control configuration including:

a routine for configuring the connected device in a network control configuration of the plurality of devices, wherein the routine for configuring the connected device further includes:

a user-interactive routine for initiating calibration of the connected device; and

a user-interactive routine for configuring the device within an overall control scheme of the process control system.

3. A process control system comprising:

- a process;
- a plurality of devices coupled to the process;
- a communication network coupled to the devices;
- a workstation coupled to the plurality of devices via the network and including a user interface; and

a software system executable on the network and implementing a routine for automatically sensing a connection of a device to a network and placing the connected device in a standby state for communicating with a user via the user interface prior to commissioning the connected device into a predefined control configuration, the software system including:

- a routine for commissioning the connected device including:
 - a user-interactive routine for assigning a physical device tag, a device address, and a device identification to the connected device; and
 - a user-interactive routine for installing a control strategy to the digital device.

4. A control system comprising:

- a network;
- a plurality of devices coupled to the network;
- a distributed controller coupled to the plurality of devices and controlling the plurality of devices according to a defined control configuration, the distributed controller having standby control logic including:
 - a control logic for sensing a device that is connected to the network but not included in the defined control configuration;
 - a control logic for supplying initial interconnect information to the connected device;
 - a control logic for uploading configuration parameters from the connected device to the distributed controller; and
 - a control logic for configuring the connected device in the defined control configuration including:
 - a user-interactive control logic for determining a device type of the connected device;
 - a user-interactive control logic for determining a role of the connected device with respect to the process control system;
 - a user-interactive control logic for assigning a physical device tag the determined role; and
 - a user-interactive control logic for verifying connection of the device to the network.

5. A control system comprising:

- a network;
- a plurality of devices coupled to the network;
- a distributed controller coupled to the plurality of devices and controlling the plurality of devices according to a defined control configuration, the distributed controller having standby control logic including:
 - a control logic for sensing a device that is connected to the network but not included in the defined control configuration;
 - a control logic for supplying initial interconnect information to the connected device;
 - a control logic for uploading configuration parameters from the connected device to the distributed controller; and
 - a control logic for configuring the connected device in the defined control configuration including standby control logic having:
 - a user-interactive control logic for initiating calibration of the connected device; and
 - a user-interactive control logic for configuring the device within an overall control scheme of the process control system.

6. A control system comprising:

- a network;
- a plurality of devices coupled to the network;
- a distributed controller coupled to the plurality of devices and controlling the plurality of devices according to a defined control configuration, the distributed controller having standby control logic including:
 - a control logic for sensing a device that is connected to the network but not included in the defined control configuration;
 - a control logic for supplying initial interconnect information to the connected device;
 - a control logic for uploading configuration parameters from the connected device to the distributed controller; and
 - a control logic for commissioning the connected device including:
 - a user-interactive control logic for assigning a physical device tag, a device address, and a device identification to the connected device; and
 - a user-interactive control logic for installing a control strategy to the digital device.

22. A process control system comprising:

- a process;
- a plurality of devices coupled to the process;
- a communication network coupled to the devices;
- a workstation coupled to the plurality of devices via the network and including a user interface; and
- a software system executable on the network and implementing a routine for automatically sensing a connection of a device to a network and placing the connected device in a standby state for communicating with a user via the user interface,
 - wherein the devices are field devices selected from devices including pumps, valves, and motors.

REMARKS

This is an amendment for a reissue application of original application (Serial No. 08/799,966). Claims 1-22 are pending with only claims 1-6, and 22 being at issue in this application for reissue. By this amendment claims 1-6, and 22 are narrowed by adding "a standby state" or "standby control logic" to ensure that the claims do not read on the Foundation Fieldbus™ Specification submitted herewith. The description of the "standby state" is found in the original application, as filed, at least at column 4, lines 31-34, and Figure 2.

If the examiner has any questions regarding this amendment, the examiner is invited to call the undersigned attorney at the examiner's convenience.

Respectfully submitted,

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Date: November 9, 2001

By:



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VERSION OF THE CLAIMS WITH MARKINGS SHOWING ALL CHANGES MADE

What is claimed is:

1. (Amended) A process control system comprising:
 - a process;
 - a plurality of devices coupled to the process;
 - a communication network coupled to the devices;
 - a workstation coupled to the plurality of devices via the network and including a user interface; and
 - a software system executable on the network and implementing a routine for automatically sensing a connection of a device to a network and placing the connected device in [an accessible] a standby state for communicating with a user via the user interface prior to commissioning the connected device into a predefined control configuration including:
 - a routine for configuring the connected device in a network control configuration of the plurality of devices, wherein the routine for configuring the connected device further includes:
 - a user-interactive routine for determining a device type of the connected device;
 - a user-interactive routine for determining a role of the connected device with respect to the process control system;
 - a user-interactive routine for assigning a physical device tag the determined role; and
 - a user-interactive routine for verifying connection of the device to the network.

2. (Amended) A process control system comprising:
a process;
a plurality of devices coupled to the process;
a communication network coupled to the devices;
a workstation coupled to the plurality of devices via the network and including a user interface; and

a software system executable on the network and implementing a routine for automatically sensing a connection of a device to a network and placing the connected device in [an accessible] a standby state for communicating with a user via the user interface prior to commissioning the connected device into a predefined control configuration including:

a routine for configuring the connected device in a network control configuration of the plurality of devices, wherein the routine for configuring the connected device further includes:

a user-interactive routine for initiating calibration of the connected device; and
a user-interactive routine for configuring the device within an overall control scheme of the process control system.

3. (Amended) A process control system comprising:
a process;
a plurality of devices coupled to the process;
a communication network coupled to the devices;
a workstation coupled to the plurality of devices via the network and including a user interface; and

a software system executable on the network and implementing a routine for automatically sensing a connection of a device to a network and placing the connected device in [an accessible] a standby state for communicating with a user via the user interface prior to commissioning the connected device into a predefined control configuration, the software system including:

a routine for commissioning the connected device including:
a user-interactive routine for assigning a physical device tag, a device address, and a device identification to the connected device; and
a user-interactive routine for installing a control strategy to the digital device.

4. (Amended) A control system comprising:

a network;

a plurality of devices coupled to the network;

a distributed controller coupled to the plurality of devices and controlling the plurality of devices according to a defined control configuration, the distributed controller having standby control logic including:

 a control logic for sensing a device that is connected to the network but not included in the defined control configuration;

 a control logic for supplying initial interconnect information to the connected device;

 a control logic for uploading configuration parameters from the connected device to the distributed controller; and

 a control logic for configuring the connected device in the defined control configuration including:

 a user-interactive control logic for determining a device type of the connected device;

 a user-interactive control logic for determining a role of the connected device with respect to the process control system;

 a user-interactive control logic for assigning a physical device tag the determined role; and

 a user-interactive control logic for verifying connection of the device to the network.

5. (Amended) A control system comprising:

a network;

a plurality of devices coupled to the network;

a distributed controller coupled to the plurality of devices and controlling the plurality of devices according to a defined control configuration, the distributed controller having standby control logic including:

- a control logic for sensing a device that is connected to the network but not included in the defined control configuration;
- a control logic for supplying initial interconnect information to the connected device;
- a control logic for uploading configuration parameters from the connected device to the distributed controller; and
- a control logic for configuring the connected device in the defined control configuration including:
 - a user-interactive control logic for initiating calibration of the connected device; and
 - a user-interactive control logic for configuring the device within an overall control scheme of the process control system.

6. (Amended) A control system comprising:
a network;
a plurality of devices coupled to the network;
a distributed controller coupled to the plurality of devices and controlling the plurality of devices according to a defined control configuration, the distributed controller having standby control logic including:

a control logic for sensing a device that is connected to the network but not included in the defined control configuration;

a control logic for supplying initial interconnect information to the connected device;

a control logic for uploading configuration parameters from the connected device to the distributed controller; and

a control logic for commissioning the connected device including:
a user-interactive control logic for assigning a physical device tag,
a device address, and a device identification to the connected device; and
a user-interactive control logic for installing a control strategy to the digital device.

22. (Amended) A process control system comprising:
a process;
a plurality of devices coupled to the process;
a communication network coupled to the devices;
a workstation coupled to the plurality of devices via the network and including a user interface; and
a software system executable on the network and implementing a routine for automatically sensing a connection of a device to a network and placing the connected device in [an accessible] a standby state for communicating with a user via the user interface,
wherein the devices are field devices selected from devices including pumps, valves, and motors.